Sealectro CORPORATION

225 HOYT STREET, MAMARONECK, NEW YORK 914 OWens 8-5600

ACTAN PRODUCT BULLETIN

BULLETIN NO. AP-02

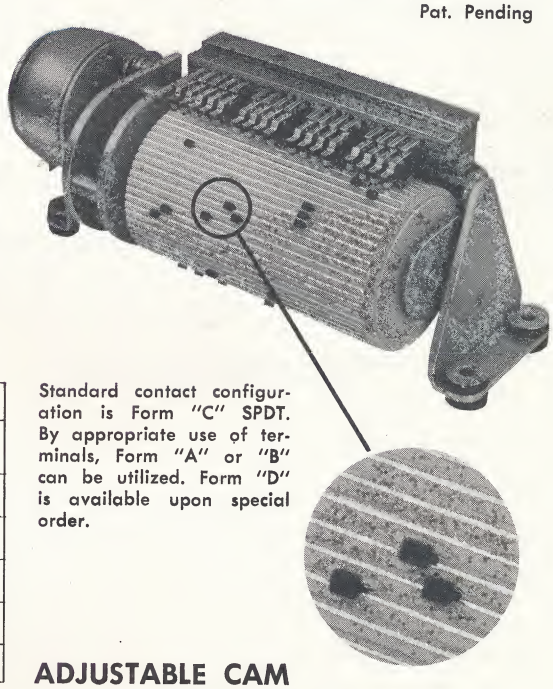
DATE: March, 1964

FIELD ADJUSTABLE ACTAN PROGRAMMERS

Pat. Pending

The Actan field adjustable programming switch provides a means of rapid program changes without tools or special skills. The exclusive Actan design utilizes dovetail grooves on the periphery of the drum with one-piece actuators which slide axially along the groove. To set a new program, the operator merely slides the actuator along the groove to line up with the desired contact set. A complete program can be set in a matter of minutes without removing and replacing the usual pin-type actuators.

Actan adjustable programming switches are available in the following standard models:



Standard contact configuration is Form "C" SPDT. By appropriate use of terminals, Form "A" or "B" can be utilized. Form "D" is available upon special order.

STANDARD CONFIGURATIONS

DRUMS		CIRCUITS CONTROLLED			
No. of Programs	Dia	6	12	24	36
16	5/8"	APO6A16M	APO12A16M	APO24A16M	APO36A16M
*36	1 1/2"	APO6A36M	APO12A36M	APO24A36M	APO36A36M
*60	2"	APO6A60M	APO12A60M	APO24A60M	APO36A60M
*90	3"	APO6A90M	APO12A90M	APO24A90M	APO36A90M
(Catalog numbers for manually-actuated switches)					

REMOTE OPERATION

Timing Motors

Timing motors for 115V, 60 cps, are available for drum speeds of 1, 2 or 10 RPM. For ordering, substitute (T) for (M), specifying speed.

Solenoids

Models denoted (*) available with stepping solenoids. Specify actuating voltage to be used. For ordering, substitute (S) for (M).

PROGRAMMING CAPABILITIES

Actan adjustable switches can be utilized for incremental numbers of programs as shown below, by "camming" actuators in adjacent grooves. In this manner, the switch may be utilized for future multiples of the number of programs initially required.

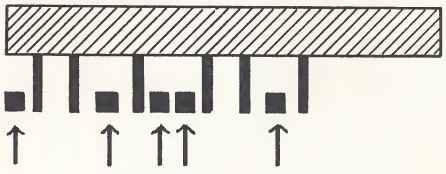
90 position drum				90
60 position drum			60	45
36 position drum		36	30	30
16 position drum	16	18	15	15
	8	12	5	5
	4	9		

ADJUSTABLE CAM

Cams, or dwells can be set up without tools or measuring devices by placing actuators in adjacent grooves at any contact set station. Accuracy is built-in by the precise grooving of the drum. Multiple ON/OFF functions can be created.

INACTIVE STORAGE AREAS

Contact sets are so arranged that actuator storage space is provided adjacent to every one. In this manner, programs can be completely changed without "chain reaction" movement of actuators, or removal and replacement of actuators.



COLOR CODED ACTUATORS

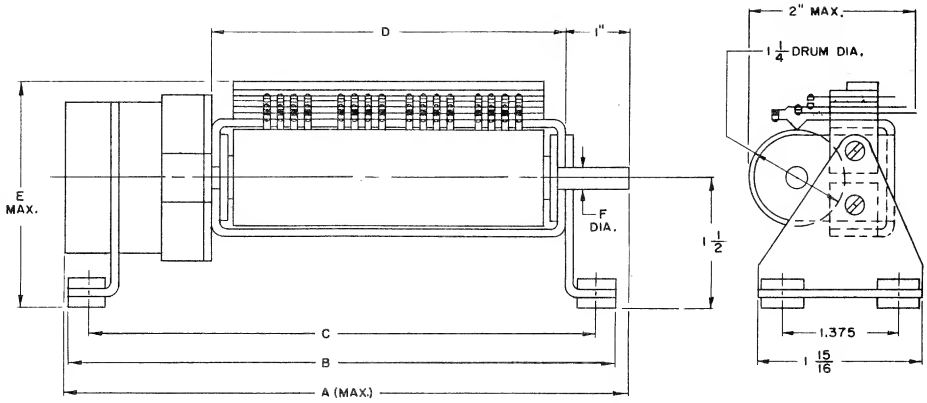
Actuators are available in black, white, red, blue and yellow on special order for program color coding requirements.

SEE OTHER SIDE FOR REF. DIMENSION.

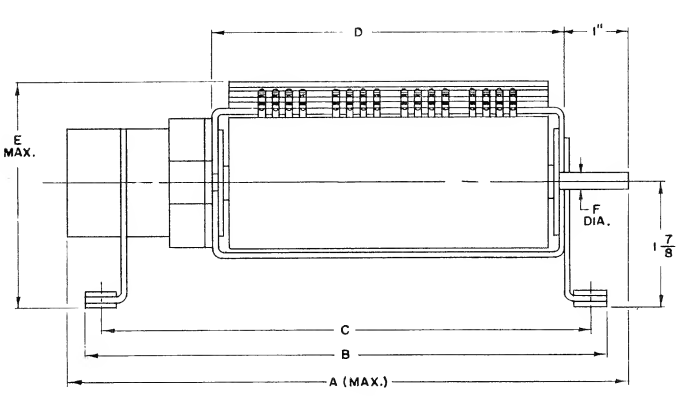
Printed in U.S.A.

Part No.	A	B	C	D	E	F
APO48A36S APO36A36S	15 5/8	14 3/4	14 1/4	11 7/8	2 5/8	1/4
APO32A36S APO24A36S	11 3/4	10 7/8	10 3/8	8	2 5/8	1/4
APO16A36S APO12A36S	7 15/16	7 1/8	6 5/8	4 3/16	2 5/8	1/4
APO8A36S APO6A36S	6 5/16	5 3/8	4 15/16	2 9/16	2 5/8	1/4

Part No.	A	B	C	D	E	F
APO48A36M APO36A36M	—	13 1/8	12 5/8	11 7/8	2 5/8	1/4
APO32A36M APO24A36M	—	9 1/4	8 3/4	8	2 5/8	1/4
APO16A36M APO12A36M	—	5 7/16	4 15/16	4 3/16	2 5/8	1/4
APO8A36M APO6A36M	—	3 3/4	3 5/16	2 9/16	2 5/8	1/4



NOTES: 1. FOOT MOUNTING BRACKETS ON MANUALLY OPERATED UNITS (M) ARE OPTIONAL.
2. ALL FRACTIONAL DIMENSIONS ARE FOR REFERENCE.



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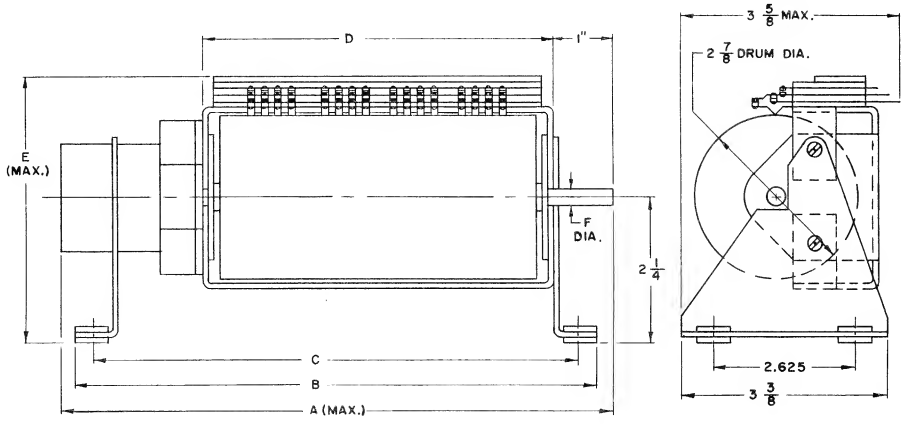
Part No.	A	B	C	D	E	F
APO48A60S APO36A60S	15 5/8	14 3/4	14 1/4	11 7/8	3 3/8	3/8
APO32A60S APO24A60S	11 3/4	10 7/8	10 3/8	8	3 3/8	3/8
APO16A60S APO12A60S	7 15/16	7 1/8	6 5/8	4 3/16	3 3/8	3/8
APO8A60S APO6A60S	6 5/16	5 3/8	4 15/16	2 9/16	3 3/8	3/8

Part No.	A	B	C	D	E	F
APO48A60M APO36A60M	—	13 1/8	12 5/8	11 7/8	3 3/8	3/8
APO32A60M APO24A60M	—	9 1/4	8 3/4	8	3 3/8	3/8
APO16A60M APO12A60M	—	5 7/16	4 15/16	4 3/16	3 3/8	3/8
APO8A60M APO6A60M	—	3 3/4	3 5/16	2 9/16	3 3/8	3/8

Part No.	A	B	C	D	E	F
APO48A90S APO36A90S	15 5/8	14 3/4	14 1/4	11 7/8	4 1/2	3/8
APO32A90S APO24A90S	11 3/4	10 7/8	10 3/8	8	4 1/2	3/8
APO16A90S APO12A90S	7 15/16	7 1/8	6 5/8	4 3/16	4 1/2	3/8
APO8A90S APO6A90S	6 5/16	5 3/8	4 15/16	2 9/16	4 1/2	3/8

Part No.	A	B	C	D	E	F
APO48A90M APO36A90M	—	13 1/8	12 5/8	11 7/8	4 1/2	3/8
APO32A90M APO24A90M	—	9 1/4	8 3/4	8	4 1/2	3/8
APO16A90M APO12A90M	—	5 7/16	4 15/16	4 3/16	4 1/2	3/8
APO8A90M APO6A90M	—	3 3/4	3 5/16	2 9/16	4 1/2	3/8



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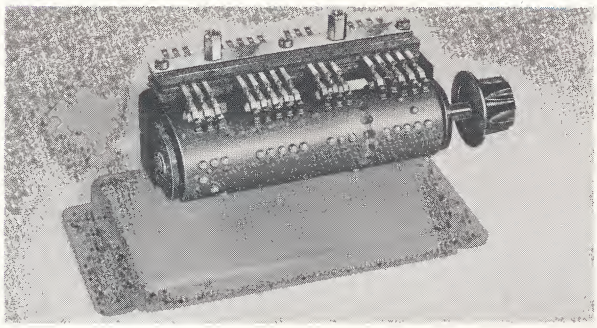
ACTAN PRODUCT BULLETIN

BULLETIN NO. AP-03

DATE: MARCH, 1964

PERMANENTLY PROGRAMMED SWITCHES



Actan permanently programmed switches are completely pre-drilled with the number of programs and circuit control contact sets as indicated by the table below. An adequate supply of Actapins for insertion in the drum is supplied with each switch. Additional supplies of Actapins can be obtained from Sealectro.

The Actapins are simply pressed into the pre-drilled holes in the desired program pattern resulting in a tamper-proof, permanent program. Once inserted, the pins cannot be readily removed from the drum.

The following table lists permanently programmed Actan switches which are considered standard catalog numbers:

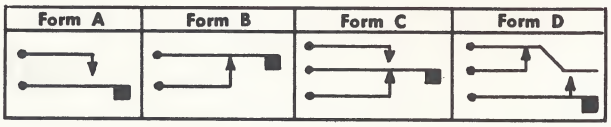
STANDARD MODELS

No. of Programs	NUMBER OF CONTACT SETS (Discrete Circuit Controls)							
	8	9*	16	17*	32	34*	48	51*
8	APO8P8M	APO9P8T	APO16P8M	APO17P8T	APO32P8M	APO34P8T	APO48P8M	APO51P8T
12	APO8P12M	APO9P12T APO9P12S	APO16P12M	APO17P12T APO17P12S	APO32P12M	APO34P12T APO34P12S	APO48P12M	APO51P12T APO51P12S
16	APO8P16M	APO9P16T APO9P16S	APO16P16M	APO17P16T APO17P16S	APO32P16M	APO34P16T APO34P16S	APO48P16M	APO51P16T APO51P16S
36	APO8P36M	APO9P36T APO9P36S	APO16P36M	APO17P36T APO17P36S	APO32P36M	APO34P36T APO34P36S	APO48P36M	APO51P36T APO51P36S
48	APO8P48M	APO9P48T APO9P48S	APO16P48M	APO17P48T APO17P48S	APO32P48M	APO34P48T APO34P48S	APO48P48M	APO51P48T APO51P48S

Suffix M=Manual; T=Timing Motor; S=Stepping Actuator

*Available only as Remote Control Units see "Remote Operation".

CONTACTS



Standard contact configuration is Form "C". Form "A" or Form "B" can be obtained by using terminations provided. Form "D" is available on special order. Contacts rated at 2 amp. @ 24 VDC or 2 amp. @ 115 VAC.

REMOTE OPERATION

Switches incorporating timing motors or stepping actuators do not require detent mechanism, and therefore permit extra contact sets in a given length. Models listed above are designated (*). 12, 16, 36 and 48 position drums may be ordered with stepping actuators. Timing motors are available for all drum configurations.

When ordering models with timing motors (T), specify 1 rpm, 2 rpm, or 10 rpm. Motors are 115 VAC.

When ordering models with stepping actuators (S), specify voltage.

SPECIAL CONFIGURATIONS

On special order Actan switches are available in a wide variety of programming positions and contact sets. Contact configurations can be combined in any manner desired, and can be stacked to provide double the number of circuits controlled. Additional contact sets can be provided under the drum, resulting in the same program sequence 180° out of phase. Consult your Sealectro sales representative, or contact Sealectro for any special switch requirements.

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ACTAN PRODUCT BULLETIN

BULLETIN NO. AP-01

DATE: March, 1964

ACTAN ORDERING INFORMATION

The following is a quick guide to ordering information for ACTAN programming devices. For special requirements, submit information for proposal.

(1) Standard contact is Form C. Forms A, B, or D are available. Combinations of any Forms are also available in groups of 8, or stacked.

(2) Optional lower contact deck for applications requiring a second set of discrete circuit controls 180° out of phase with upper deck.

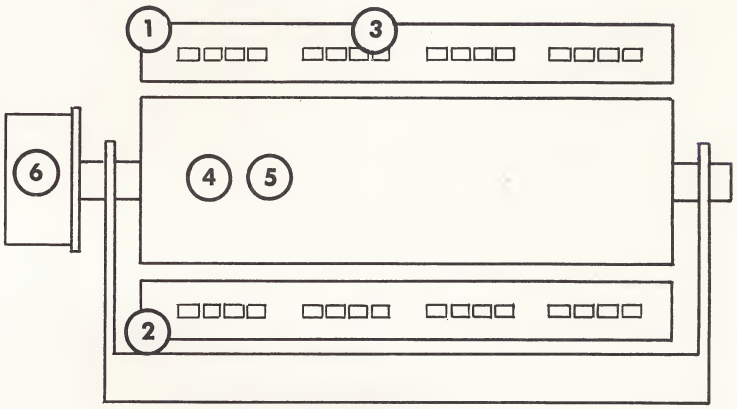
(3) Discrete circuits (contact stations) are available in the following preferred numbers:
Manually operated: 8, 16, 24, 32, 40, 48.
Remotely operated: 8, 9, 16, 17, 32, 34, 48, 51.
Other numbers are available on special order.

(4) Program drums available in permanent and field-adjustable types. Permanent type can be drilled and pinned at factory, or pinned by customer (actuating pins furnished by factory). Adjustable type permits in-field programming and changing at any time without tools. Also, provides cam actions with multiplicity of on-off functions.

(5) Preferred number of discrete programs for permanent drums are: 8; 12; 16; 24; 48. For adjustable drums: 36; 60. Other program configurations are available on special order.

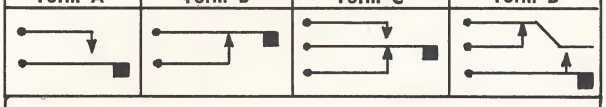
(6) Drive may be manual or remote. Remote drives include timing motors in range of 60 to 1/100 RPM speeds and stepping actuators. In ordering timing motors, specify voltage and drum speed required. For stepping actuators, specify voltage.

Terminal Note: Standard terminal is solder type. Flat cable, factory-welded to contact springs, is available in any stated length on special order.



CONTACTS

Form A	Form B	Form C	Form D



CONTACT SPECIFICATIONS

Current Rating
2 Amp. at 24 VDC or 115 VAC standard. Other ratings available on special order. Explosion-proof contacts available.

Resistance
.050 ohm maximum. Down to dry circuit available on special order.

Life
Better than 100,000,000 operations at low level loads.

AP	0	16	P	16	T

Drive
(T) Timing motor; (M) Manual; (S) Stepping Actuator.

Programs
Number indicates number of discrete programs on drum.

Drum Type
(P) designates permanent programming; (A) designates field-adjustable programming.

Circuits
Number indicates contact stations, or discrete electrical circuit controls.

Contacts
(O) is for single row of contacts at top of switch; (L) is for second row of contacts at bottom of assembly.

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